Contemporary Psychological Research on Social Dilemmas

A social dilemma is a situation in which the interests of the collective and its individual members clash. In these situations individuals typically are tempted to take actions that favor (sometimes even maximize) their short-term egocentric interests. However, if all group members adopt such behaviors, the group suffers since all its members are worse off than they could be by endorsing alternative prosocial actions that favor (sometimes even maximize) the collective interest. This book provides an overview and summary of the state of social psychological research on social dilemmas. It is organized around four core issues: individual differences, which determine people’s preferences for outcomes that promote either their own or their group’s well-being; the study of dynamic processes based on simulations of artificial societies; social dilemmas that emerge in intergroup conflicts; and the effect of various types and sources of uncertainty on behavior in social dilemma situations.

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The papers in this book explore some of the most pressing issues facing citizens, scientists, and policy makers dealing with social dilemmas today. These dilemmas arise in the management of natural resources like fisheries, forests, or clean air; in the regulation of temptation as with international bribery where firms are induced to pay government officials bribes to have their proposals funded by the government; or in the control of intentional violence where persons are willing to sacrifice their lives if only they can take the lives of their enemies at the same time. All these classes of problems are social rather than technological in nature. They are complicated by the fact that they involve multiple agents, with conflicting incentives, in which ultimate outcomes are far removed, often in time, space, and psychological distance, from the proximal choices of the parties. Thus a decision to pay a bribe to a customs official to clear a pallet of goods from the docks of New York (or Buenos Aires, or London, or Jakarta, or Capetown), does not appear to have a causal effect of creating or supporting corruption. After all, if one disapproves of corruption and only does it because everyone else does it, bribery then is only a regrettable cost of doing business.

Social dilemma or collective action problems are ubiquitous and vexing. Each real problem, like corruption, has a unique context and history that must be appreciated to be fully understood. There are, however, common elements that social dilemmas share, and these factors may also be valuable in the successful management of these problems. The chapters in this book address four of the central issues that characterize social dilemmas. These issues are individual differences, dynamic properties, intergroup effects, and uncertainty and its consequences.

The chapters in the first section focus on two sources of individual differences, social value orientation and risk preference. The former, typically denoted as SVOs, refer to people’s preferences for outcomes that promote their own or the group’s well-being. These are generally referred to as prosocial versus prosocial orientation. Some theorists have suggested that these
differences reflect the level at which people view the social dilemma. If it is seen as an individual problem, we are likely to have pro-self preferences. If we see the problem as a global or group-level problem, we may have prosocial preferences. A mountain of research has shown that prosocial people are more cooperative than pro-self people, but these findings are little more than validity checks. These chapters report other interesting and important findings, about the effects of these value orientations, their measurement, and their determinants.

The second source of individual difference analyzed in this section concerns risk preference. It is a characteristic of most social dilemmas that the act of cooperation exposes the cooperator to exploitation by noncooperators. The study of risk preferences in social dilemmas is a relatively new area of research and one that is quite promising, as is evidenced by the findings that are reported.

Doi’s chapter makes a transition from the study of social-value orientation to the study of the collective consequences of individual differences. This line of research asks the general question of what happens in a group, society, or organization when the choices of people depend on what other people do. Suppose, for instance, that prosocial people are not only more likely to cooperate than pro-self persons, but that they also imitate the cooperative act of another more than pro-self people do. If people can change their choices as a function of what other people do, then a dynamic process is introduced that may result in entirely cooperative or entirely noncooperative populations, or in populations that have a stable mixture of cooperators and noncooperators.

The study of the dynamics of cooperation in social dilemmas requires, almost by its definition, a different type of methodology. It is typically not feasible to do experiments with large groups, so an alternative – the use of computer simulation – has been widely adopted. Computer simulations allow investigators to specify the qualities of the members of artificial “societies,” including the ways in which the members influence each other, and then to investigate the consequences of these specifications. One of the surprising results of this growing area of research is the finding that cooperative, trusting, and generous behavior can emerge from rather simple rules that entail reciprocity and risk tolerance. However, this area of research is still in its infancy, and the chapters that are included here provide a mere sampling of what we can hope to accomplish using this methodology.

When we mentioned the concept of a prosocial person, we glossed over an important complication, and that is the issue of which group’s interest a person is trying to promote. Farmers sharing an irrigation system are a group playing some type of a game against nature. The same is true of fishermen trying to allocate quotas for fishing vessels. The challenge in these cases is to induce people to suppress their immediate self-interest for the good of the collective. Things change markedly, as the chapters in
the third section note, when we have two groups competing against each other. The general structure of these intergroup conflicts is that the collective, comprising both groups, is best served when the group members do not make prosocial sacrifices. These sacrifices are tribal, intended to benefit one group at the expense of the other group (and the wider sociality as well). The research reported in these chapters suggests that one special case in which cooperation is relatively easy to evoke occurs when the cooperation is aimed at defeating another group. A common enemy elicits tribal cooperation but, paradoxically and sadly, it also leads to arms races that are globally disastrous.

The final section of the book contains chapters dealing with the critically important issue of uncertainty. Uncertainty in social dilemmas takes many forms, each having a unique role in interfering with cooperative solutions. There may be uncertainty about how much of a resource there is to be shared among the members of a group, uncertainty about how many members there are, uncertainty about the rate at which a resource can replenish itself, uncertainty about the behaviors and/or the intentions of the relevant others, uncertainty about the state of one’s own (or the other’s) resources, and so on. Theoretical analyses of these sources of uncertainty have indicated that they may play qualitatively different roles in developing strategies for cooperation. The chapters in this final section attest to the multifaceted complexity of uncertainty in these dilemmas and highlight the need for future researchers to try to understand its full impact.